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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/867,055

05/29/2001

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06/30/2005

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EXAMINER

MILIA, MARK R

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/867,055	<b>Applicant(s)</b> ROZZI, WILLIAM A.	
	<b>Examiner</b> Mark R. Milia	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment was received on 2/22/05, and has been entered and made of record. Currently, claims 1-42 are pending.

### ***Specification***

2. Applicant's amendment to the specification to address a minor typographical error has overcome the objection to the specification cited in the previous Office Action. Therefore, the objection is withdrawn.

### ***Response to Arguments***

3. Applicant's arguments, see pages 9-13, filed 2/22/05, with respect to the rejection(s) of claim(s) 1-42, more specifically claims 1, 14, 25, 30, 36, 39, and 42 under 35 U.S.C. 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the amendments to the claims and a different interpretation of previously cited references.

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4. Particularly, as amended, claims 1, 9-14, 21-23, 25, 29, 30, 35-37, 39, and 42 now requires embedding information within raster image data using steganography.

The examiner agrees that the references of Lipton and Swen do not disclose such a feature. Therefore, due to the amendments to the claims, a new ground(s) of rejection will be made.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-6, 14, 15, 17-18, 21, 25-26, 30-32, and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5835098 to Lipton as cited on Information Disclosure Statement dated August 24, 2001 in view of U.S. Patent Application Publication No. 2001/0054150 to Levy.

Regarding claim 1, Lipton discloses a method comprising: obtaining information describing color properties of a device that generates an image (see column 2 lines 1-17 and 55-60 and column 5 lines 39-53) and embedding the information within raster image data associated with the image such that the embedded information does not substantially affect the visual appearance of the image to a user (see column 2 lines 1-17, column 3 lines 23-29 and 58-65, and column 4 lines 20-38 and 49-56).

Lipton does not disclose expressly embedding information within raster image data using steganography.

Levy discloses embedding information within raster image data using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Regarding claim 14, Lipton discloses a method comprising: receiving an image file of an image, the image including information describing color properties of the image embedded in raster image data of the image file (see column 2 lines 1-17, column 3 lines 23-29 and 58-65, column 4 lines 20-38 and 49-56, and column 5 lines 38-43) and extracting the information describing color properties of the image from the raster image data of the image file (see column 5 lines 38-53).

Lipton does not disclose expressly embedding information within raster image data using steganography.

Levy discloses embedding information within raster image data using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Regarding claim 25, Lipton discloses an image file comprising: raster image data (see column 2 lines 55-67 and column 3 lines 10-57, reference states the use of bitmap fonts which is analogous to a raster image because a raster image is just an image made up of pixels, also known as a bitmap image, therefore the claimed element is anticipated by the reference) and information embedded within the raster image data, the information describing color properties of the image, such that the embedded information does not substantially affect the visual appearance of the image to a user

(see column 3 lines 23-29, 38-47, and 58-65, column 4 lines 20-38 and 49-56, column 4 line 59-column 5 line 6, and column 5 lines 28-53).

Lipton does not disclose expressly embedding information within raster image data using steganography.

Levy discloses embedding information within raster image data using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Regarding claim 30, Lipton discloses a computer readable medium carrying program code that upon execution: embeds information describing color properties of a device within raster image data associated with an image such that the embedded information does not substantially affect the visual appearance of the image to a user (see column 3 lines 23-29, 38-47, and 58-65, column 4 lines 20-38 and 49-56, column 4 line 59-column 5 line 6, column 5 lines 28-53, and column 6 lines 59-63).

Lipton does not disclose expressly embedding information within raster image data using steganography.

Levy discloses embedding information within raster image data using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Regarding claim 36, Lipton discloses a computer readable medium carrying program code that upon execution: extracts information describing color properties of the image from raster image data of the image file (see column 5 lines 28-53 and column 6 lines 59-63).

Lipton does not disclose expressly embedding information within raster image data using steganography.

Levy discloses embedding information within raster image data using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Regarding claim 39, Lipton discloses an image acquisition device comprising: memory that stores a color profile of the device (see Fig. 1, column 2 lines 46-52, and column 3 lines 38-47) and a data embedding module that embeds the color profile in image data acquired by the device (see column 4 lines 20-65 and column 5 lines 7-53).

Lipton does not disclose expressly embedding information within raster image data using steganography.

Levy discloses embedding information within raster image data using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton & Levy are combinable because they are from the same field of endeavor, embedding information in image data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the use of steganography to embed information within raster image data as described by Levy with the system of Lipton.

The suggestion/motivation for doing so would have been to use steganography to embed information at the correct stage, which is during raster image processing, to avoid problems from occurring (see paragraph [0011] of Levy).

Therefore, it would have been obvious to combine Levy with Lipton to obtain the invention as specified in claims 1, 14, 25, 30, 36, and 39.

Regarding claims 2 and 15, Lipton and Levy disclose the method discussed in claims 1 and 14, and Lipton further discloses wherein the information includes a color profile (see column 4 lines 20-38 and 49-56).

Regarding claim 4, Lipton and Levy disclose the method discussed in claim 2, and Lipton further discloses extracting the color profile from the image (see column 5 lines 39-53).

Regarding claim 5, Lipton and Levy disclose the method discussed in claim 4, and Lipton further discloses modifying the image based on the color profile, and displaying the modified image (see column 4 lines 8-19, column 5 lines 28-37, and column 6 lines 11-27).

Regarding claim 6, Lipton and Levy disclose the method discussed in claim 4, and Lipton further discloses modifying the image based on the color profile, and printing the modified image (see Figs. 2 and 3, column 4 lines 8-19, and column 5 lines 28-37).

Regarding claim 17, Lipton and Levy disclose the method discussed in claim 15, and Lipton further discloses displaying the image according to the color profile (see column 5 lines 28-53).

Regarding claim 18, Lipton and Levy disclose the method discussed in claim 15, and Lipton further discloses printing the image according to the color profile (see column 5 lines 28-53).

Regarding claim 21, Lipton and Levy disclose the method discussed in claim 14, and Lipton further discloses prior to extracting the embedded information, detecting the embedded information (see column 5 lines 28-37).



Regarding claim 26, Lipton and Levy disclose the method discussed in claim 25, and Lipton further discloses wherein the information embedded within the raster image data comprises a color profile (see column 4 lines 20-65 and column 5 lines 28-53).

Regarding claim 31, Lipton and Levy disclose the method discussed in claim 30, and Lipton further discloses carrying program code that upon execution extracts the information from the image (see column 5 lines 28-53).

Regarding claim 32, Lipton and Levy disclose the method discussed in claim 31, and Lipton further discloses carrying program code that upon execution modifies the image based on the information (see column 4 lines 8-19 and column 5 lines 11-27).

Regarding claim 37, Lipton and Levy disclose the method discussed in claim 36, and Lipton further discloses carrying program code that upon execution detects the embedded information describing color properties of the image (see column 5 lines 28-53).

Regarding claim 38, Lipton and Levy disclose the method discussed in claim 36, and Lipton further discloses carrying program code that upon execution modifies the image based on the information (see column 4 lines 8-19 and column 5 lines 11-27).

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5806081 to Swen et al. as cited on Information Disclosure Statement dated April 17, 2003 in view of Levy.

Swen discloses a system comprising: an image acquisition device (see Fig. 1 and column 4 lines 49-54) and a host computer coupled to the image acquisition device,

the host computer including a memory device that stores a color profile of the image acquisition device and a data embedding module that embeds the color profile in image data acquired by the image acquisition device (see Figs. 6 and 8, column 3 lines 51-57, column 9 lines 35-54, column 11 lines 22-35, column 11 line 61-column 12 line 3, and column 13 line 50-column 14 line 35).

Swen does not disclose expressly embedding information using steganography.

Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Swen & Levy are combinable because they are from the same field of endeavor, embedding information into a document.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the use of steganography as described by Levy with the system of Swen.

The suggestion/motivation for doing so would have been to use steganography to embed information at the correct stage of processing a document to avoid problems from occurring.

Therefore, it would have been obvious to combine Levy with Swen to obtain the invention as specified in claim 42.

Claims 3, 10-12, 16, 22-24, 33-34, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton and Levy as applied to claims 1, 2, 15, 21, 30, and 39 above, and further in view of Swen.

Regarding claims 3 and 16, Lipton and Levy do not disclose expressly wherein the color profile is one of the following: a spectral profile and a colorimetric profile.

Swen discloses wherein the color profile is one of the following: a spectral profile and a colorimetric profile (see column 4 lines 16-34).

Regarding claim 10, Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton and Levy do not disclose expressly embedding an indicator within the image, the indicator indicating that information describing color properties of the image is stored within the image.

Swen discloses embedding an indicator within the image, the indicator indicating that information describing color properties of the image is stored within the image (see column 8 line 13-column 9 line 34 and column 11 lines 61-63).

Regarding claim 11, Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton and Levy do not disclose expressly embedding an indicator within the image, the indicator identifying where the information describing color properties of the image is stored within the image.

Swen discloses embedding an indicator within the image, the indicator identifying where the information describing color properties of the image is stored within the image (see column 8 line 13-column 9 line 34 and column 11 lines 61-63).

Regarding claim 12, Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton and Levy do not disclose expressly attaching an indicator to the image, the indicator indicating that information describing color properties of the image is stored within the image.

Swen discloses attaching an indicator to the image, the indicator indicating that information describing color properties of the image is stored within the image (see column 8 line 13-column 9 line 34 and column 11 lines 61-63).

Regarding claim 22, Lipton and Levy do not disclose expressly wherein detecting the embedded information comprises detecting an indicator.

Swen discloses wherein detecting embedded information comprises detecting an indicator (see column 8 line 13-column 9 line 34 and column 14 lines 36-40 and 53-57).

Regarding claim 23, Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton and Levy do not disclose expressly wherein detecting the indicator comprises detecting the indicator embedded within the image.

Swen discloses wherein detecting the indicator comprises detecting the indicator embedded within the image (see column 8 line 13-column 9 line 34 and column 14 lines 36-40 and 53-57).

Regarding claim 24, Lipton and Levy do not disclose expressly wherein detecting the indicator comprises detecting the indicator attached to the image.

Swen discloses wherein detecting the indicator comprises detecting the indicator attached to the image (see column 8 line 13-column 9 line 34 and column 14 lines 36-40 and 53-57).

Regarding claim 33, Lipton and Levy do not disclose expressly carrying program code that upon execution embeds an indicator within the image.

Swen discloses carrying program code that upon execution embeds an indicator within the image (see column 8 line 13-column 9 line 34 and column 11 lines 61-63).

Regarding claim 34, Lipton and Levy do not disclose expressly carrying program code that upon execution: attaches an indicator to the image.

Swen discloses carrying program code that upon execution: attaches an indicator to the image (see column 8 line 13-column 9 line 34 and column 11 lines 61-63).

Regarding claim 40, Lipton and Levy do not disclose expressly wherein the image acquisition device is a scanner.

Swen discloses wherein the image acquisition device is a scanner (see column 4 lines 49-54).

Regarding claim 41, Lipton and Levy do not disclose expressly wherein the image acquisition device is a digital camera.

Swen discloses wherein the image acquisition device is a digital camera (see column 4 lines 49-54).

Lipton, Levy, & Swen are combinable because they are from the same field of endeavor, embedding information into documents.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the embedding techniques of Swen with the system of Lipton and Levy.

The suggestion/motivation for doing so would have been to provide a more accurate system in which detection of a device profile is made easier because the dispatcher always attempts to use preferred CMM first (see column 15 line 66-column 16 line 11 of Swen).

Therefore, it would have been obvious to combine Swen with Lipton and Levy to obtain the invention as specified in claims 3, 10-12, 16, 22-24, 33-34, and 40-41.

Claims 7, 8, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton and Levy as applied to claims 1 and 14 above, and further in view of U.S. Patent No. 6603879 to Haikin et al.

Regarding claims 7 and 19, Lipton and Levy do not disclose expressly wherein the information describing color properties includes a path indicating a network location of a color profile for the image.

Haikin discloses wherein the information describing color properties includes a path indicating a network location of a color profile for the image (see column 7 lines 5-9).

Regarding claims 8 and 20, Lipton and Levy do not disclose expressly wherein the path is an internet uniform resource locator.

Haikin discloses wherein the path is an internet uniform resource locator (see column 7 lines 5-9, reference states retrieving the color image from the Internet which is known to use uniform resource locators to direct users to information).

Lipton, Levy, & Haikin are combinable because they are from the same field of endeavor, embedding information into documents.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the storage and retrieval of images over a network with the system of Lipton and Levy.

The suggestion/motivation for doing so would have been to provide a broader range of input sources for acquisition of images to be able to extract a color profile to allow more images to be accurately color matched.

Therefore, it would have been obvious to combine Haikin with Lipton and Levy to obtain the invention as specified in claims 7, 8, 19, and 20.

Claims 9, 13, 29, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton and Levy as applied to claims 1, 25, and 30 above, and further in view of U.S. Patent Application Publication No. 2001/0047476 to Yen et al.

Regarding claims 9 and 29, Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton and Levy do not disclose expressly wherein the image includes a border, and wherein embedding information includes embedding the information within the border.

Yen discloses wherein the image includes a border, and wherein embedding information includes embedding the information within the border (see page 2 paragraph [0032]).

Regarding claims 13 and 35, Levy discloses embedding information using steganography (see paragraphs [0004], [0011] lines 11-13 and 18-24, and claim 9).

Lipton and Levy do not disclose expressly creating a border for the image and embedding the information within raster image data of the border.

Yen discloses creating a border for the image and embedding the information within raster image data of the border (see page 2 paragraph [0032]).

Lipton, Levy, & Yen are combinable because they are from the same field of endeavor, embedding information within documents.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the placement of embedded information of Yen with the system of Lipton and Levy.

The suggestion/motivation for doing so would have been to provide a wider range of embedding possibilities.

Therefore, it would have been obvious to combine Yen with Lipton and Levy to obtain the invention as specified in claims 9, 13, 29, and 35.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipton and Levy as applied to claim 25 above, and further in view of "Data Embedding in Text for a Copier System", Epson Palo Alto Laboratory to Bhattacharjya and Ancin.

Regarding claim 27, Lipton and Levy do not disclose expressly wherein the information embedded within the raster image data alters the image.



Bhattacharjya and Ancin discloses wherein the information embedded within the raster image data alters the image (see page 245, abstract and first paragraph of introduction).

Regarding claim 28, Lipton and Levy do not disclose expressly wherein the alteration is not perceivable to a human observer.

Bhattacharjya and Ancin disclose wherein the alteration is not perceivable to a human observer (see page 245, abstract and first paragraph of introduction).

Lipton, Levy, & Bhattacharjya and Ancin are combinable because they are from the same field of endeavor, embedding information within documents.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the embedding of data that is imperceptible with the system of Lipton and Levy.

The suggestion/motivation for doing so would have been to allow embedded data to be hidden in an image from the human visual system so the image appears unaltered.

Therefore, it would have been obvious to combine Bhattacharjya and Ancin with Lipton and Levy to obtain the invention as specified in claims 27 and 28.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

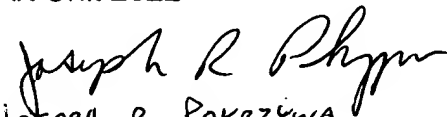
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached at (571) 272-7402. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MRM

Mark R. Milia  
Examiner  
Art Unit 2622

  
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